



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/589,012

04/26/2007

Virgil Allen Watson

P06721US1-WATSON

4193

34082 7590 03/19/2010

ZARLEY LAW FIRM P.L.C.
CAPITAL SQUARE
400 LOCUST, SUITE 200
DES MOINES, IA 50309-2350

EXAMINER

DYE, ROBERT C

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

03/19/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/589,012
Filing Date: April 26, 2007
Appellant(s): WATSON ET AL.

Timothy Zarley
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/02/2009 appealing from the Office action mailed 10/14/2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

This appeal involves claims 2, 4, 6-13 and 15-19.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,800,757	Abrams et al.
6,131,320	Eberle et al.
4,541,190	Weiner et al.
2003/0154639	Bowers et al.
4,137,657	Wardle
WO 2003/0161017	Alberts
5,922,367	Assalita et al.
4,880,368	Hasl et al.
4,397,625	Hellmer et al.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757).

Abrams et al. (hereinafter Abrams) teaches a sign with a plastic sheet or film 204 containing a graphics side (col 18, line 59-col 19, line 4; sheet is equivalent of label) that is integrally molded onto a planar substrate material 16 (col 17, line 26, see figure 17) and contains holes 220 on the rear side for securing the sign to a second object (col 19, lines 12-13, figure 20).

Regarding the flexible thermoplastic substrate, Abrams teaches that the label can be formed of a plastic sheet such as Teslin (col 20, lines 50), which is known to be a flexible thermoplastic material (the material is commonly used for

Art Unit: 1791

laminating plastic identification cards or in passports). Although the claims cite the use of an injection molding method rather than a compression molding method as taught by Abrams to form the planar substrate which is fused to the label, the Examiner wishes to point out to applicant that claim 2 is directed towards a product and as such will be examined under such conditions. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (See MPEP 2113). Abrams discloses that molten thermoplastic material is integrally molded to a label under pressure by a compression device as opposed to an injection device. Although injection molding device is not used, the final structure of the product is substantially the same (label fused to a planar substrate).

Regarding the second object being a second sign, Abrams teaches mounting features which allow for the sign to be attached to a second object but does not expressly disclose the second object as being a second sign. Abrams teaches that the sign is capable of various uses including a point-of-sale sign (Fig. 21). Since it is well-known in the marketing industry to use two-sided point of use promotion signs to attract customers from two directions, it would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 1791

to connect the promotional sign of Abrams to another promotional sign in order to attract customers from two directions. Furthermore, in reciting that the second object is a second sign, the claim does not define a distinct structural limitation for the mounting feature that might distinguish it from a mounting feature that allows the sign to be attached to an object such as a wall. Since Abrams discloses that the sign can be mounted onto a variety of support structures including frames and poles (col 19, lines 13-14; col 20, lines 26-30), the sign of Abrams would be expected to be capable of being mounted to a second sign.

Regarding claim 4, Abrams teaches that the sign contains a plurality of ribs 202 which facilitates strengthening the sign (col 18, lines 44-47).

Claims 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757) as applied to claim 2 above, and further in view of Eberle et al. (USP 6,131,320) or Weiner et al. (USP 4,541,190).

Regarding claim 6, wherein the mounting feature is a male snap element adapted to mate with a corresponding female snap element, Abrams does not teach a male snap element. However, male and female snap elements are well known in the sign art as an effective means for connection. For example, Eberle et al. (abstract, "male and female hinge projections snap together") and Weiner et al. (col 4, lines 20-25) disclose male and female snap element for securing sign portions together. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute a male snap element for the securing means in the sign of Abrams because one of ordinary

Art Unit: 1791

skill in the art would have been able to carry out such a substitution to achieve the predictable result of efficiently and effectively connecting the signs.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757) as applied to claim 2 above, and further in view of in view of Bowers et al. (PG Pub 2003/0154639).

Regarding claim 7, Abrams teaches a sign with a label integrally molded onto planar substrate and a mounting feature for securing the sign. Abrams does not teach a sign with an end extending between the front and back side that includes mounting features for securing the sign to a second sign. In the same field of endeavor of sign manufacture, Bowers et al. teach a sign having a front with a label and a back side. In one embodiment, Bowers et al. teach a sign with an extending end having mounting features for connection to a second sign (see figure 7, wherein mounting brackets 46a, 46b connect two display signs from the backs of each sign, and paragraph 33). The configuration of this embodiment would place the labels on each sign directly next to each other such that they are contiguous. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to connect the signs end to end as taught by Bowers et al. in the method of Abrams for the purpose of increasing the customizability of the sign and allow for more diverse messages to be displayed to attract or inform persons.

Claim 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757) in view of Bowers et al. (PG Pub 2003/0154639) as applied to claim 7 above, and further in view of Wardle (USP 4,137,657)

Regarding claim 8, Abrams in view of Bowers discloses a second sign attached next to a first sign for the purpose of increasing the customizability of the sign (see above). In regards to a groove, such is known in the sign art as an effective means for connection. Wardle discloses a display wherein grooves are located at the edges to permit mating between the plural displays (Fig. 1). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the groove mounting feature as taught by Wardle for the mounting feature in the sign of the hypothetical combination of Abrams and Bowers because one of ordinary skill in the art would have been able to carry out such a substitution to achieve the predictable result of efficiently and effectively connecting the two signs.

Claim 9, 10, 11, 12, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757).

Regarding claim 9, Alberts discloses a method for injection molding a product containing a label wherein said method comprises the steps of providing a first and second mold portion located opposite from one another (mold portions 6 and 8); associating an injection device with the first mold portion (supply duct 16 is associated with injection molding machine shown schematically as pump

Art Unit: 1791

18, Fig 4, 5); associating an ejector system with first sign mold portion (Alberts teaches that the transfer part 38 is provided to remove the formed product 48 from the first mold cavity 14 but that optionally, an ejection means can be provided in the mold cavity 14 with the advantage of removing the product in a simpler manner without the product sustaining damage, pg 7, lines 21-25; Alberts teaches that conventional ejection pins can be employed in cavity 14, pg 12, lines 9-12); placing a label 60 on the second mold portion 8 (see fig. 5, pg 8, lines 1-6); closing the first and second mold portions together and injecting the first sign mold portion via the injection device (pg 8, lines 7-16), and removing the previously formed sign prior to mold closing (pg 8, lines 7-8).

With regards to the ejector system contacting the formed sign on the side opposite the label, such would be inherent in the method of Alberts which locates the ejector system and injection port in mold cavity 14, which is opposite side 62 onto which the label is placed (see Fig 5). When the mold cavity is closed, the injected material would contact the back of the label to form product 48 which then remains in cavity 14 as illustrated (label would be on the product face opposite the surface of cavity 14). Alberts teaches that convention ejection pins can be used rather than transfer part 38 to remove products from cavity 14. Conventional pins would be located within cavity 14 to dislodge product 48 and as such, would contact the cavity-side surface of the part which is opposite the label side.

Alberts teaches the production of injection molded products wherein labels are fused onto one side of a substrate and said product can have varying shapes

Art Unit: 1791

(products can be large or long, pg 10, line 19), but Alberts does not expressly teach the products as being signs. In the same field of endeavor of molding thermoplastic articles with fused sheet-like inserts, Abrams et al. (hereinafter Abrams) teaches that a sign (point-of-purchase sign, col 20, lines 33-34) may be produced via the use of a printed graphic as the insert in a molding operation (see figure 17 and 21). It would have been obvious to a person having ordinary skill in the art to produce a sign as taught by Abrams with the method of Alberts in order to form a diverse article capable of attracting customers and relaying information.

Regarding claims 10 and 11, Alberts teaches that the automated transfer device moves between first and second mold portions to simultaneously place a label and remove a formed product (pg 2, lines 17-26; pg 7, line 6- pg 8, line 16; Fig 5).

Regarding claim 12, Alberts teaches that the material is injected through channel 16 into the first mold cavity (pg 5, lines 5-10, 18-23; Fig. 5).

Regarding claim 15, Alberts discloses an automated transfer device 4 which places labels and ejection pins for removing formed product. Alberts teaches that said transfer device includes guiding means which are adapted to mate with guidance members on the molding portion (see rails or slots 22 shown in Fig. 5 and 7). Although the guidance members are shown as being associated with the first mold portion (which Alberts describes as the stationary part of the mold), Alberts teaches that the guidance members can also be included in the movable part (pg 12, lines 5-7). Alberts also discloses a mold design wherein the

Art Unit: 1791

guidance system is on the second mold portion (see Fig 10, first portion denoted by injection system 16 and 18).

Regarding claim 19, Alberts discloses that multiple labels can be placed within the second mold portion via multiple transfer devices (see Fig 8, 9; pg 9, lines 22-pg 10, 20).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757) as applied to claim 12 above, and further in view of Assalita et al. (USP 5,922,367, of record.

The hypothetical combination of Alberts and Abrams does not teach a method wherein a heated sprue bushing is used to eliminate the need to manually trim the sign. In the same field of endeavor of injection molding, Assalita et al. (hereinafter Assalita) teach the use of a heated sprue bushing in an injection mold for the purpose of reducing material waste by preventing material from solidifying within the sprue bushing (col 1, lines 44-47; col 4, lines 67-68). Assalita further teaches that the sprue material, if allowed to solidify, has to be removed from the part and discarded (col 1, lines 32-35). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to employ a heated sprue bushing as taught by Assalita in the method of Alberts and Abrams for the purpose of reducing material waste and eliminating the need to remove excess sprue material from the formed part (col 1, lines 44-47; col 4, lines 67-68).

Claim 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757) as applied to claim 15 above, and further in view of Hasl et al. (USP 4,880,368).

The hypothetical combination of Alberts and Abrams does not teach a method wherein the label hopper contains a guidance member adapted to mate with the automated device responsible for transferring labels to the mold. In the same field of endeavor of in-mold labeling, Hasl et al. teaches a label hopper with fingers 92 and 92a which adapt to mate with the cutouts 86 in the heads of 75 (label transfer device) (see figure 4, col 9, lines 46-50) for the purpose of aligning the label transfer device with the labels. Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have used guidance members on the label hopper as taught by Hasl et al. in the method of Alberts and Abrams for the purpose of aligning the automated label transfer device.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757) and Hasl et al. (USP 4,880,368) as applied to claim 16 above, and further in view of Hellmer et al. (USP 4,397,625).

Regarding claim 17, the hypothetical combination of Alberts, Abrams and Hasl et al. teach a method for manufacturing a sign via in-mold labeling as described above in claim 16, but does not teach a method wherein the orientation of the label is adjusted on the label hopper. In the same field of

Art Unit: 1791

endeavor of methods for manufacturing products via injection molding with in-mold inserts, Hellmer et al. (hereinafter Hellmer) teach a method wherein a label hopper is provided with mechanisms designed to hold a label in a particular orientation (see figure 3). Hellmer teach that a "labels L are maintained at a preset orientation by a plurality of elongated guide rods 64 which are arranged in accordance with the configuration of the particular label" (col 3, lines 35-43). Thus it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have used orientation adjustment mechanisms as taught by Hellmer in the method of the aforementioned combination for the benefit of holding the labels in a preset orientation for pick up and accurate placement by the label transfer means.

Regarding claim 18, wherein the adjustment mechanism is used that can adjust in a lateral direction, a vertical direction and rotational direction, Hellmer et al. does not explicitly describe the directions with which the guidance rods can be arranged. However, Hellmer does state that the guidance rods are positioned in accordance with the configuration of the particular label (col 3, lines 35-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to position the guidance rods of Hellmer as necessary in a lateral, vertical or rotational direction in the hypothetical combination of Alberts, Abrams and Hasl for the benefit of ensuring an accurate placement of the insert in the molding device.

(10) Response to Argument

Applicant's arguments filed 12/02/2009 have been fully considered but they are not persuasive.

Regarding claim 2, Applicant contends that Abrams teaches a basketball backboard sign which is not intended to be attached to a second sign. Applicant argues that the modification is accomplished only through the use of improper hindsight reasoning.

Examiner notes that claim 2 does not define a distinct structure for the claimed mounting feature; only that is included with the planar substrate, is located on a side opposite the label and is adapted to secure the sign to a second sign. The sign of Abrams has mounting features located on the side opposite the label to allow for attachment to a variety of second objects. The Applicant has not argued or claimed any unique feature that the mounting means must have to enable it to attach to a second sign as opposed to a simple post.

In regards to the basketball backboard use and improper hindsight reasoning, Abrams discloses a molded sign which can be employed in various applications and in particular, Abrams discloses an advertisement sign (point-of-sale sign). The sign of Abrams is not limited to a basketball backboard and thus is not limited to only attaching the sign to posts or walls. Abrams notes that the sign can be attached to varied support structures including frames and posts (col 19, lines 13-14; col 20, lines 26-30). The display of advertisement signs is very well-known in the art, including the attachment of multiple signs for the purpose of displaying information from multiple directions or multiple messages (this is

Art Unit: 1791

evidenced by Eberle et al. and Bowers et al.). The signs of Abrams include mounting features located on the backside of the sign, opposite the label. It would have been obvious to a person having ordinary skill in the art at the time of the invention to employ mounting features adapted to attach the sign to a second sign for the purpose of displaying additional information. Such would have employed knowledge which was within the level of ordinary skill at the time the claimed invention was made. In regards to improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant further contends that Eberle and Bowers do not cure the deficiencies of the Abrams.

Examiner disagrees. In regards to Eberle, the mounting feature projects outwardly from the side of the sign opposite from the label to connect to an opposing mounting projection which projects outwardly from the back of a second sign. Thus, the mounting features are construed as being located to secure the backside of each sign. In regards to Bowers, the Examiner notes that the claim requires that the mounting feature secure the backside of the second sign to the side opposite the label of the first sign (i.e. backside of the first sign). Bowers discloses means to secure a sign to a second sign wherein connector

Art Unit: 1791

members 46a and 46b (illustrated in Fig. 7) are included and are adapted to attach to the backside of each sign. Claim 2 does not preclude first sign being arranged in side-by-side relation to a second sign, only that the mounting feature secures the backside of each sign.

Regarding claim 9, Applicant contends that Alberts fails to disclose an ejector system that contacts a formed sign on a side opposite from the label. Applicant points to transfer device 4 which removes an earlier formed product 7 from the mold cavity 14 with vacuum cups 56 which engage the same side of the finished product 48 onto which the label has been molded, and thus does not contact a formed sign on a side opposite from the label.

While Examiner agrees that Alberts discloses a part transfer system which employs suction cups that contact the product on the label side, that transfer system represents one particular embodiment in the disclosure. Alberts discloses that "different ejection means can be provided for removing products from the mold cavities 14, for instance conventional ejection pins, the product then falling from the mold 2 under the influence of gravity. A transfer device to be used therewith can then, for instance be designed without first transfer part 38" (part 38 is responsible for removing the product and includes vacuum cups 56; pg 12, lines 9-12 and Fig. 5; pg 7, lines 21-25). Conventional ejection pins operate by extending from a mold surface so as dislodge a formed article by pushing it from said mold surface. Since the article of Alberts is molded such that the label is located on the surface opposite of the cavity 14 surface, locating a conventional

Art Unit: 1791

ejection pin system in cavity 14 as suggested by Alberts would intrinsically result in the pins contacting the non-label side of the formed article. Thus, Alberts discloses an ejection system which contacts a formed sign on a side opposite from the label.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Robert Dye

Conferees:

/Joseph S. Del Sole/

Supervisory Patent Examiner, Art Unit 1791

/Anthony McFarlane/